## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE JOINT APPLICATION PURSUANT TO 1994

HOUSE BILL NO. 501 FOR THE APPROVAL OF

THE PRINCIPLES OF AGREEMENT, DEMAND SIDE

MANAGEMENT, THE UNION LIGHT, HEAT AND

POWER COMPANY, AND FOR AUTHORITY FOR THE

UNION LIGHT, HEAT AND POWER COMPANY TO

IMPLEMENT VARIOUS TARIFFS TO RECOVER

COSTS, LOST REVENUES AND RECEIVE

INCENTIVES ASSOCIATED WITH DEMAND SIDE

MANAGEMENT PROGRAMS

CASE NO. 95-312

## ORDER

IT IS ORDERED that The Union Light, Heat and Power Company ("ULH&P") shall file the original and 12 copies of the following information with the Commission no later than October 16, 1995, with a copy to all parties of record. Each copy of the data requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the witness who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible.

1. ULH&P's proposed decoupling mechanism includes a usage growth factor in the calculation of the adjusted level of non-variable revenues. The usage growth factor is based on a regression analysis of historical use data over the past 10 years.

Prepare a schedule presenting the following information for the past 10 years:

- a. The actual annual total residential usage.
- b. The actual annual total residential usage, weather normalized.
- c. The 12-month average number of residential customers.
- d. The average actual annual total residential usage per residential customer (part (a) divided by part (c)).
- e. The average actual annual total residential usage, weather normalized, per residential customer (part (b) divided by part (c)).

This information should be provided separately for the electric and gas businesses.

- 2. The results of the ordinary least squares analysis of historical residential electric and gas usage were presented and discussed at the July 26, 1995 informal conference and are attached to this Order as Appendix A. The figures in the column headed "Actual" on pages 1 (electric) and 2 (gas) of 2 are assumed to be the natural logarithms of average residential usage for the period 1984-1994.
  - a. Is this a correct assumption? Explain.
- b. Are these actual or weather normalized usage figures?
- c. If these are average customer usage figures, explain whether the customer level used in the calculation is average

number of customers for the calendar years or the number of customers as of calendar year end.

- 3. ULH&F's decoupling proposal includes a calculation which recognizes both the change in the number of customers and a usage growth factor.
- a. Is ULH&P aware of any other utility regulatory commission which has approved a decoupling mechanism that recognizes both the change in the number of customers and growth in usage? Identify those commissions and briefly describe the approved mechanism.
- b. Is ULH&P aware of any industry or research articles which support the recognition of both customer change and usage growth in a decoupling mechanism? Identify the articles by title and publication and provide a copy of the most current article.

Done at Frankfort, Kentucky, this 6th day of October, 1995.

PUBLIC SERVICE COMMISSION

For the Commission

ATTEST:

Executive Director

## APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 95-312 DATED October 6, 1995.

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DOING RTGA ORDINARY LEAST SQUARES FREQUENCY: A INTERVAL: 84 TO 94 (11 OBS.) DEPENDENT VARIABLE: LOG(GASACTUAL) COEFFICIENT STD.ERROR T-STAT INDEPENDENT VARIABLE 0) 4,9839 0.06627 75.206 CONSTANT 1) -0.015705 0.0040632 -3.8651 TIME R-BAR SQUARED: 0.58227 DURBIN-WATSON: 1.80 STANDARD ERROR: 0.042616 NORMALIZED: 0.0090047 79N PLOT DATE ACTUAL FITTED PLOT : \*= ACTUAL: += FITTED 1984 4.8828 4.8111 4.7536 4.7954 1785 1986 4.7536 4.7797 1987 4.7185 4.764 1988 4.7958 4.7483 4.7622 4.7326 1989 1990 4.672B 4.7169 4.6728 4.7012 1991 \*++++

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'DO RTGA

1992 4.6821 4.6855

1993 4.6913 4.6698

1994 4.6728 4.6541 --\*